

# UK Primary Care Information Network

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**Background.** The use of electronic mail (e-mail) for educational purposes has been described in previous work.<sup>1,2</sup> The Department of Family Practice of the University of Kentucky (UK) College of Medicine has developed a *Primary Care Information Network* which provides medical students assigned to a required third year, ambulatory Primary Care Clerkship (PCC) with access to electronic information resources including: electronic mail, MEDLINE, and the World Wide Web. Use of these electronic resources is a mandatory component of the PCC curriculum.

**Methods.** The PCC includes 4 weeks each of Family Practice (FP), General Internal Medicine (GIM), and General Pediatrics curricular time. Clerkship students are required to complete either their FP or GIM PCC rotation off-campus in a rural area of Kentucky which is served by an Area Health Education Center. Each PCC student is provided with a laptop computer for use during the FP and GIM rotations. Students are taught to use these computers to: conduct MEDLINE searches via *Grateful Med*, browse the World Wide Web, and send/receive electronic mail. They are required to perform a minimum of two MEDLINE searches per week and must review the results of these searches with a course preceptor. The preceptors are asked to help students to evaluate the quality and relevance of the information retrieved by the students using a qualitative literature review form which is returned to the course director.

PCC students also participate in PCLIST, a listserv created especially for this course. PCLIST is used by faculty to pose discussion questions to PCC students, by PCC students to request assistance from faculty; and as a means for PCC students to exchange information with each other about their clinical learning experiences during this course. PCC students are also required to post details of at least one MEDLINE search and one Web Search to PCLIST during the clerkship. Feedback on the strategies and results of the searches is posted to

PCLIST by a medical librarian and the course director so that all PCC students can benefit.

**Results.** During the 1995-96 academic year, PCC students reported on the results of a total of 656 MEDLINE searches which they conducted during this course. The search questions were primarily clinical in nature. Although abstracts, retrieved from 59% of the MEDLINE searches, yielded sufficient information to answer the search questions; PCC students obtained one or more journal articles from 39% of the searches. Overall, students reported that the information obtained from their MEDLINE searches was sufficiently useful, that they did not feel a need to look elsewhere for answers to 31% of their MEDLINE search questions. Finally, PCC students reported that their MEDLINE searches were the most influential source of information for making patient care decisions 21% of the time.

During this same period, PCC students also posted 653 messages to PCLIST (average of 8.0 messages/student, range:1-27). The discussions conducted via PCLIST focused primarily on clinical issues but touched on number of other important educational themes including:

1. Preceptor-student relationships.
2. Clinical care of "difficult patients."
3. Regional differences in medical practice.
4. Health promotion and disease screening.
5. Ethical issues in primary care.

**Conclusions.** This project demonstrates that MEDLINE searches are useful in ambulatory training programs. It also illustrates how e-mail discussions can: focus student attention on important clinical issues which which might not be seen by every student during a particular rotation; link rural students/faculty with their campus peers; and help medical students to share biomedical information with each other.

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<sup>1</sup>Sheridan M, LeGros E. Computer-assisted instruction using electronic mail. J Nurs Staff Dev 1995 Mar-Apr;11(2):100-3.

<sup>2</sup>Coulehan JL, Williams PC, Naser C. Using electronic mail for a small-group curriculum in ethical and social issues. Academic Medicine 1995 Feb;70(2):168-60.